

REMARKS

The Examiner has rejected claims 12-13 under 35 USC 112, first paragraph as failing to comply with the written description requirement. Claims 12-13 have been canceled, and new claim 14 has been added. Claim 14 requires the connectors to be fabricated from a material with lower thermal conductivity.

Claim 1-4 and 6-10 have been rejected under 35 USC 103(a) as being unpatentable over Master in view of Keith. Applicant respectfully disagrees with this rejection.

The examiner indicates that the Masters patent discloses a first and second concrete layer, spaced apart from each other, an insulation layer, a post-tensioning tendon assembly including anchor plates connecting with longitudinal elements of high-strength rods, wherein the eyebolt of Masters operatively and adjustably connects the anchor plate an longitudinal element to produce tension in the longitudinal element and compression in the concrete layers.

Applicant disagrees, as the Masters patent does not disclose a tendon assembly that is for post tensioning. The eyebolt of Masters, which the examiner indicates produces the tension and compression in the concrete layers, does no such thing. The eyebolt system of Masters is clearly for lifting. Masters specifically states “[t]he ends of each panel are reinforced with a steel sling lifting assembly embedded in concrete that includes removable eyebolts at the top edge where by the panels can be attached to cables at each end for hoisting above the foundation columns and then lowering into place.” (col. 2, lines 42-47). See also col. 3, lines 30-33 (“Wall units can be manufactured off-site, hoisted and lowered into place using a lifting rod or cable 100 inserted through removable eyebolts attached to wall units.”). The eyebolt system of Masters is clearly for connecting the sandwich together and for aid in lifting the panels, and it cannot be used to put tension in system. The Masters patent does not disclose use of a post-tensioning tendon assembly, as claimed by Applicant.

Also, Applicant disagrees with the Examiner’s statement that Masters discloses post-tensioning tendons substantially in the plane of the insulation layer. In order to clarify the positioning of the post-tensioning tendons, Applicant has now claimed post-tensioning tendons that are “positioned between the two concrete layers and embedded in the insulation” The eyebolt system of Masters, in addition to not being a post-tensioning tendon, is not positioned as claimed by Applicant. Figure 7 of Masters illustrates this difference. Reference numeral 31 of Masters designates vertical spaces at the end of each unit (col. 3, line 67 - col.4, line 1). The

vertical spaces 31 of Masters are filled with concrete and metal framework, as shown in Figs. 4 and 12 (col. 3, lines 56-58). As seen in Fig. 7, the insulation layer 32 does not extend to the eyebolt system.

In addition, Applicant claims a high strength rod, strand or bar as the longitudinal element in claim 3 and a high-strength longitudinal element in claim 8. The rods 56 of Masters that the examiner indicates are high strength are only described as “vertical rods 56 of reinforcing bar” (col. 3, lines 63-64). In response to the last office action, Applicant submitted a document from the Post-Tensioning Institute, a copy of which is attached to this response. The Post-Tensioning Institute states that “post-tensioned reinforcing consists of very high strength steel strands or bars” and then compares the tensile strength of post-tensioning/high strength strands to typical non-prestressed reinforcing (rebar) (pg. 2). Clearly, the high strength rods used for post-tensioning are distinguishable from the reinforcing bar described in Masters. This difference would be recognized by one skilled in the art.

As for the Keith reference, the connectors in Keith penetrate the casting form 82a, 82b (col. 16, line 41, Figs. 3-4). The connectors of the current invention are located entirely in the concrete layers. Claim 1 has been amended to clarify this difference. Claim 7 already described this, by requiring the second concrete layer to be consolidated around the exposed end portions of the connectors.

As Masters and Keith do not disclose all of the elements of the claimed invention, Applicant respectfully requests that this rejection be withdrawn.

Claims 1-4 and 6-10 have also been rejected under 35 USC 103(a) as being unpatentable over Franklin in view of Clark. Applicant respectfully disagrees with this rejection.

The examiner has identified element 24 of Franklin as the longitudinal element claimed by Applicant. Element 24 of Franklin is not a post-tensioning tendon; instead, element 24 is a wall bar that extends up from the base structure or foundation and is used to modularly stack wall units (col. 5, lines 1-6). The longitudinal element of Applicant’s invention is not embedded in the base structure or foundation. This distinction appears in claim 1. Similarly, claim 7 requires the anchor plates to be positioned in the concrete layers. As seen in Fig. 7 of Franklin, the nut 64 of Franklin is not positioned in the concrete layers 36. The nut 64 of Franklin is used to tie two panels together vertically.

As for claims 3 and 8, again, the examiner has erroneously labeled rod 24 of Franklin as “high strength”, even though the disclosure does not describe this rod as being high strength. Element 24 of Franklin is a wall bar, with no requirement that it be a high strength bar used for post-tensioning.

Finally, Franklin is a system of modular walls; in other words, the wall panels of Franklin are stacked on top of each other and are not post-tensioned as claimed by Applicant. The claimed invention is for a nearly full-height wall where the post-tensioning is done before erecting the wall in place. The Franklin patent teaches away from the post-tensioning system of Applicant’s invention.

As Franklin combined with Clark does not disclose every element of Applicant’s claimed invention, Applicant respectfully requests the withdrawal of this rejection.

The application has been amended to correct minor informalities, to further distinguish the application over the prior art, and to more particularly point out and distinctly claim the subject matter which Applicant regards as the invention so as to place the application, as a whole, into a prima facie condition for allowance. Great care has been taken to avoid the introduction of new subject matter into the application as a result of the foregoing modifications.

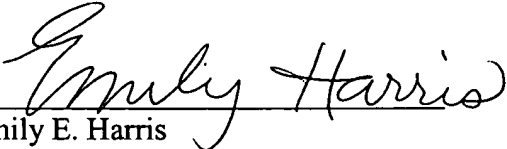
Accordingly, the purpose of the claimed invention is not taught nor suggested by the cited references, nor is there any suggestion or teaching which would lead one skilled in the relevant art to combine the references in a manner which would meet the purpose of the claimed invention. Because the cited references, whether considered alone, or in combination with one another, do not teach nor suggest the purpose of the claimed invention, Applicant respectfully submits that the claimed invention, as amended, patentably distinguishes over the prior art, including the art cited merely of record.

Based on the foregoing, Applicant respectfully submits that its claims 1-4, 6-10, and 14, as amended, are in condition for allowance at this time, patentably distinguishing over the cited prior art. Accordingly, reconsideration of the application and passage to allowance are respectfully solicited.

The Examiner is respectfully urged to call the undersigned attorney at (515) 288-2500 to discuss the claims in an effort to reach a mutual agreement with respect to claim limitations in the present application which will be effective to define the patentable subject matter if the present claims are not deemed to be adequate for this purpose.

Respectfully submitted,

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